

Application No. 10/657,607

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1. (Currently Amended) An organophotoreceptor comprising:
 - a) an electrically conductive substrate;
 - b) a photoconductive element comprising at least a charge generation compound wherein the photoconductive layer is on the electrically conductive substrate; and
 - c) an overcoat layer comprising a first binder and at least an inorganic ionic salt wherein the overcoat layer is on the photoconductive layer and wherein the binder is not a silsesquioxane polymer and wherein the inorganic ionic salt is dissolved during incorporation into the overcoat layer, and wherein the inorganic ionic salt comprises a multivalent cation selected from the group consisting of Ca⁺², Mg⁺², Sr⁺², Ba⁺², Al⁺³, Co⁺², Ni⁺², Cu⁺², and Zn⁺².
2. (Original) An organophotoreceptor according to claim 1 wherein the photoconductive layer further comprises an electron transport compound.
3. (Original) An organophotoreceptor according to claim 1 wherein the photoconductive layer further comprises a charge transport compound.
4. (Original) An organophotoreceptor according to claim 3 wherein the charge transport compound comprises a stilbenyl group.

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5. (Original) An organophotoreceptor according to claim 1 wherein the photoconductive layer further comprises a charge transport compound and an electron transport compound.

6. (Original) An organophotoreceptor according to claim 1 wherein the first binder is a water-based polymeric binder.

7. (Original) An organophotoreceptor according to claim 1 wherein the first binder is an organic polymeric binder.

8. (Original) An organophotoreceptor according to claim 1 wherein the first binder is selected from the group consisting of fluorinated polymer, siloxane polymer, fluorosilicone polymer, silane, polyethylene, polypropylene, polyacrylate, poly(methyl methacrylate-co-methacrylic acid), urethane resin, urethane-epoxy resin, urethane-acrylic resin, and a combination thereof.

9. (Previously Presented) An organophotoreceptor according to claim 1 wherein the inorganic ionic salt in the overcoat layer is present at a concentration between 0.5% and 50% by weight.

10. (Previously Presented) An organophotoreceptor according to claim 1 wherein the inorganic ionic salt in the overcoat layer is present at a concentration between 1% and 30% by weight.

11. (Cancelled)

12. (Original) An organophotoreceptor according to claim 1 wherein the photoconductive element further comprises a second binder.

13. (Original) An organophotoreceptor according to claim 1 further comprising a sublayer located between the electrically conductive substrate and the photoconductive element.

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14. (Original) An organophotoreceptor according to claim 1 further comprising a barrier layer located between the overcoat layer and the photoconductive element.

15. (Original) An organophotoreceptor according to claim 1 wherein the salt comprises an anion selected from the group consisting of Br^- and I^- .

16. (Original) An organophotoreceptor according to claim 1 wherein the overcoat layer has a thickness from about 0.1 microns to about 20 microns.

17. (Currently Amended) An electrophotographic imaging apparatus comprising:

(a) a light imaging component; and

(b) an organophotoreceptor oriented to receive light from the light imaging component, the organophotoreceptor comprising an electrically conductive substrate and a photoconductive element on said electrically conductive substrate wherein said photoconductive element comprises a charge generation compound and an overcoat layer comprising a first binder and an inorganic ionic salt, wherein the photoconductive layer is on the electrically conductive substrate, wherein the overcoat layer is on the photoconductive layer and wherein the binder is not a silsesquioxane polymer, and wherein the inorganic ionic salt is dissolved during incorporation into the overcoat layer, and wherein the inorganic ionic salt comprises a multivalent cation selected from the group consisting of Ca^{+2} , Mg^{+2} , Sr^{+2} , Ba^{+2} , Al^{+3} , Co^{+2} , Ni^{+2} , Cu^{+2} , and Zn^{+2} .

18. (Original) An electrophotographic imaging apparatus according to claim 17 wherein the photoconductive element further comprises an electron transport compound.

19. (Original) An electrophotographic imaging apparatus according to claim 17 wherein the photoconductive element further comprises a charge transport compound.

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20. (Original) An electrophotographic imaging apparatus according to claim 17 wherein the first binder is a water-based polymeric binder.
21. (Original) An electrophotographic imaging apparatus according to claim 17 wherein the first binder is an organic polymeric binder.
22. (Previously Presented) An electrophotographic imaging apparatus according to claim 17 wherein the inorganic ionic salt in the overcoat layer is present at a concentration between 1% and 50% by weight.
23. (Original) An electrophotographic imaging apparatus according to claim 17 wherein the cation is selected from the group consisting of lithium cation and sodium cation.
24. (Original) An electrophotographic imaging apparatus according to claim 17 wherein the photoconductive element layer further comprises a second binder.
25. (Original) An electrophotographic imaging apparatus according to claim 17 further comprising a liquid toner dispenser.
26. (Currently Amended) An electrophotographic imaging process comprising:
(a) applying an electrical charge to a surface of an organophotoreceptor comprising an electrically conductive substrate; a photoconductive layer comprising a charge generation compound; and an overcoat layer comprising a first binder and at least an inorganic ionic salt, wherein the photoconductive layer is on the electrically conductive substrate, wherein the overcoat layer is on the photoconductive layer and wherein the binder is not a silsesquioxane polymer, and wherein the inorganic ionic salt is dissolved during incorporation into the overcoat layer, and wherein the inorganic ionic salt comprises a multivalent cation selected from the group consisting of Ca^{+2} , Mg^{+2} , Sr^{+2} , Ba^{+2} , Al^{+3} , Co^{+2} , Ni^{+2} , Cu^{+2} , and Zn^{+2} ;

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- (b) imagewise exposing the surface of the organophotoreceptor to radiation to dissipate charge in selected areas and thereby form a pattern of charged and uncharged areas on the surface;
- (c) contacting the surface with a toner to create a toned image; and
- (d) transferring the toned image to a substrate.

27. (Original) An electrophotographic imaging process according to claim 26 wherein the photoconductive layer further comprises at least an electron transport compound.

28. (Original) An electrophotographic imaging process according to claim 26 wherein the photoconductive layer further comprises at least a charge transport compound.

29. (Original) An electrophotographic imaging process according to claim 26 wherein the first binder is a water-based polymeric binder.

30. (Original) An electrophotographic imaging process according to claim 26 wherein the first binder is an organic polymeric binder.

31. (Previously Presented) An electrophotographic imaging process according to claim 26 wherein the inorganic ionic salt in the overcoat layer is present at a concentration between 1% and 50% by weight.

32. (Cancelled)

33. (Original) An electrophotographic imaging process according to claim 26 wherein the photoconductive element further comprises a second binder.

34. (Original) An electrophotographic imaging process according to claim 26 wherein the salt comprises an anion selected from the group consisting of Br⁻ and I⁻.

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35. (Currently Amended) An organophotoreceptor comprising:

a) an electrically conductive substrate;

b) a photoconductive element comprising at least a charge generation compound

wherein the photoconductive layer is on the electrically conductive substrate; and

c) an overcoat layer comprising a first binder and at least an inorganic ionic salt
wherein the overcoat layer is on the photoconductive layer and wherein the binder is not a
silsesquioxane polymer, wherein the inorganic ionic salt comprises a multivalent cation
selected from the group consisting of lithium cation and sodium cation of Ca⁺², Mg⁺², Sr⁺²,
Ba⁺², Al⁺³, Co⁺², Ni⁺², Cu⁺², and Zn⁺² [[or]] and the anion is a polyatomic inorganic anion.

36. (Previously Presented) The organophotoreceptor of claim 35 wherein the polyatomic
inorganic anion is selected from the group consisting of NO₃⁻, SO₄⁻² and ClO₄⁻.